

1381-254

1/16/2014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511C)
1200 Pennsylvania Avenue NW
Washington, DC 20460

EPA Reg. Number:

1381-254

Date of Issuance:

JAN 16 2014

Term of Issuance:

Unconditional

Name of Pesticide Product:

Mk-3

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Winfield Solutions, LLC
P.O. Box 64589
St. Paul, MN 55164-0589

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This registration does not eliminate the need for continual reassessment of the pesticide. If the EPA determines at any time that additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under section 3(c)(2)(B) of FIFRA.

This product is unconditionally registered in accordance with FIFRA Sec. 3(c)(5) and is subject to the following terms:

1. Submit and/or cite all data required for registration of your product under FIFRA section 3(c)(5) and section 4 when the Agency requires all registrants of similar products to submit such data.
2. Revise the EPA Registration Number to read, "EPA Reg. No. 1381-254."
3. A one year study is required to satisfy the Storage and Stability and Corrosion Characteristics requirements (Guidelines: OCSPP 830.6317 and 830.6320). You have 18 months from the date of registration to provide these data.
4. Submit three (3) copies of the revised final printed labeling before you release the product for shipment.

A stamped copy of the label and an A-79 Enclosure are enclosed for your records.

Signature of Approving Official:

Robert McNally, Director

Date:

1/16/14

Biopesticides and Pollution Prevention Division (7511P)

CONCURRENCES

SYMBOL	EPA Form 8570-6	7511P	7511P				
SURNAME	Walsh	Bull	LEAHY				
DATE	1/14/14	1/14/14	1/16/14				

2/10

ACCEPTED

JAN 16 2014

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. 1381-254

Mk-3

PLANT GROWTH REGULATOR

Hormone compounds to stimulate plant growth.

ACTIVE INGREDIENTS

Cytokinin, as Kinetin	0.76%
Gibberellic Acid	0.25%
Indole-3-butyric Acid.....	0.37%

OTHER INGREDIENTS	<u>98.62%</u>
TOTAL	100.00%

KEEP OUT OF REACH OF CHILDREN

See Back Panel [Inside Booklet] for Additional Precautionary Statements

EPA Reg. No. 1381-ELU

EPA Est. No. 39578-TX-001
NET CONTENTS: 1 lb. [2 lbs., 5 lbs.]

Distributed by:
WINFIELD SOLUTIONS, LLC,
P.O. Box 64589, St. Paul, MN 55164

1/0113/4

Lot No. _____

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Personal Protective Equipment:

Mixers, loaders, applicators and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes plus socks.

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwater or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours unless wearing appropriate PPE.

EXCEPTION: If the product is soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

- coveralls over long-sleeved shirt and long pants,
- chemical-resistant gloves, and
- shoes plus socks.

CHEMIGATION INFORMATION

Apply this product only through sprinkler including center pivot, lateral move, side (wheel) roll, traveler, big gun, solid set, hand move, or furrow irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Maintain agitation in the supply tank while adding the required amount of Mk-3, and throughout the application. Mk-3 should be added to the supply tank at the end of water application (prior to last complete cycle in moving systems).

The correct amount of Mk-3 to add is calculated as the rate in ounces per acre x the number of acres covered by the contents of the supply tank.

(For example, if the supply tank covers ten acres and the rate on the label for that crop is 0.2 ounces per acre, add $10 \times 0.2 = 2.0$ ounces to the supply tank at the beginning of the last full cycle).

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with the pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

The pesticide supply tank should be agitated throughout the application of Mk-3. Mk-3 should be applied at the end of the water application.

Mk-3 should be applied at the end of the irrigation period in a sufficient amount of water to allow proper coverage of plant or crop but not to exceed 18 fluid ounces of Mk-3 per acre per application.

IN-FURROW CHEMIGATION

1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Maintain agitation in the supply tank while adding the required amount of Mk-3, and throughout the application. Mk-3 should be added to the supply tank at the end of water application (prior to last complete cycle in moving systems).

The correct amount of Mk-3 to add is calculated as the rate in ounces per acre x the number of acres covered by the contents of the supply tank.

(For example, if the supply tank covers ten acres and the rate on the label for that crop is 0.2 ounces per acre, add $10 \times 0.2 = 2.0$ ounces to the supply tank at the beginning of the last full cycle).

SPRINKLER CHEMIGATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to a point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Maintain agitation in the supply tank while adding the required amount of Mk-3, and throughout the application. Mk-3 should be added to the supply tank at the end of water application (prior to last complete cycle in moving systems).

The correct amount of Mk-3 to add is calculated as the rate in ounces per acre x the number of acres covered by the contents of the supply tank.

(For example, if the supply tank covers ten acres and the rate on the label for that crop is 0.2 ounces per acre, add $10 \times 0.2 = 2.0$ ounces to the supply tank at the beginning of the last full cycle).

Mk-3 should be applied at the end of the irrigation period in a sufficient amount of water to allow proper coverage of plant or crop but not to exceed 2.4 ounces of Mk-3 per acre per application.

APPLICATION INFORMATION

IMPORTANT: Read the entire "Directions for Use" and the "Notice" before using this product. If terms are not acceptable, return the unopened product container at once.

Apply Mk-3 by ground or air. If applied by air, use 3 to 5 gallons of water per acre. If applied by ground on vegetable or field crops, use 5 to 25 gallons of water per acre.

Test results have shown that this product can stimulate higher yields through a larger root mass, earlier fruiting and increased fruit retention. Mk-3 is a tool to increase plant efficiency.

SPRAY PROGRAM FOR VEGETABLE CROPS

SWEET CORN AND POPCORN: Apply one, two, or all of the following applications.

Apply 0.6 to 0.8 ounces per acre in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting.

AND/OR

Apply 0.4 ounces per acre when the plants are in the 4-6 leaf stage.

AND/OR

Apply 0.4 ounces per acre at the 8-10 leaf stage.

SPRAY PROGRAM FOR FIELD CROPS

COTTON - Non-Transgenic Varieties: Apply Mk-3 according to *one* of the following schedules.

Schedule A:

1st Application - Apply 0.4 ounces per acre in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting.

2nd Application - Apply 0.4 ounces per acre at pinhead square. This can be applied in a tank mix that contains 4 fluid ounces per acre of Mepex® Plant Regulator brand of mepiquat chloride¹⁾.

3rd Application - Apply 0.5 ounces per acre at early bloom.

Schedule B:

1st Application - Apply 0.3 ounces per acre on a band at the 3-7 leaf stage.

2nd Application - Apply 0.4 ounces per acre at the pinhead square stage. This can be applied in a tank mix that contains 4 fluid ounces per acre of Mepex® Plant Regulator brand of mepiquat chloride¹⁾.

3rd Application - Apply 0.4 ounces per acre at early bloom.

COTTON - Transgenic Varieties:

(Cotton varieties that have been genetically manipulated to have insect-resistance and/or herbicide-resistance built in.)

1st Application - Apply 0.4 ounces per acre in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting.

2nd Application - Apply 0.5 ounces per acre at pinhead square. This can be applied in a tank mix that contains 4 fluid ounces per acre of Mepex® Plant Regulator brand of mepiquat chloride¹⁾.

3rd Application – Repeat the above application at first bloom. If needed for vegetative growth control, repeat the above application at mid-bloom.

Higher rates and/or late season applications may be warranted under high stress conditions where square and/or boll retention is needed. During the bloom and post-bloom period, additional applications or higher rates can be applied but do not exceed a total of 3.25 ounces per acre per season.

1) TANK MIXING INFORMATION – Mk-3 and Mepex

Perform a Compatibility Test for Mix Components before preparing a tank mix application. Read and follow the applicable Restrictions and Limitations and Directions For Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Compatibility Test

Add components to a jar in the following sequence, using 1/16 teaspoon of Mk-3 and 1/2 teaspoon of Mepex.

- 1) Water: For 20 gallons per acre spray volume use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2) Mk-3, then Mepex: Cap the jar and invert 10 cycles.
- 3) Let the solution stand for 15 minutes.
- 4) Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles.

Tank Mixing Order

- 1) Water: Begin by agitating a thoroughly clean sprayer tank half full of the required amount of clean water.
 - 2) Mk-3, then Mepex
 - 3) Remaining quantity of water
- Only moderate agitation should be used while mixing and transporting.

FIELD CORN*: Apply one, two or all of the following applications.

Apply 0.6 to 0.8 ounces per acre in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting.

AND/OR

Apply 0.8 to 1.3 ounces per acre at the 3 to 10 leaf stage.

AND/OR

Apply 0.8 ounces per acre between initial silking and brown silk.

*For field corn grown for seed, apply 0.6 to 0.8 ounces per acre in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting.

SOYBEANS: Apply according to *one* of the following schedules.

Schedule A:

Apply 0.4 ounces per acre at the 3-5 trifoliate leaf stage. Apply a second application of 0.4 ounces between R1 and R3.

Schedule B:

Apply 0.8 ounces per acre between R1 and R3.

WHEAT: Apply according to *one* of the following schedules.

Schedule A:

Apply 0.6 to 0.8 ounces per acre in-furrow at planting.

Schedule B:

Apply 0.4 ounces per acre prior to jointing. Apply 0.4 ounces at the flag leaf stage.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Protect from freezing. Store out of direct sunlight.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of empty container in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure or accident, call
CHEMTREC 1-800-424-9300.**

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR

CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THE NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

Mepex is a registered trademark of Nufarm Americas Inc.